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ABSTRACT

The foundation and development between 1850 and 1900 of English "redbrick" colleges, also referred to as civic universities, are considered. Colleges were successfully established in Manchester, Leeds, Liverpool, and other cities. The history of these colleges is considered in order to provide tentative conclusions about the origins of civic universities. The civic universities are thought to be the outcome of a well-developed provincial culture created largely by a newly risen middle class. Mercantile and commercial wealth combined with social, cultural, and economic interests to create a way of life and thought distinctly different from that of an older elite tied to the land, the past, and London. Its intellectual and educational aspects incorporated both the persons and the studies of the ancient universities and the traditional classical-liberal culture. The new curricula of the civic colleges, and much of their attitudes toward research, scholarship, clientele, and purpose were accepted by all twentieth century universities. (SW)

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THE FOUNDATIONS OF ENGLISH "REDBRICK": WHO CONTRIBUTED, WHO ATTENDED, AND WHY.*

ASHE 1980

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Between 1850 and 1900 colleges were founded in several English cities,[1] especially in the North and Midlands. They quickly rose from small and humble beginnings to substantial size and university status by the 20th Century. The usual explanation of their success attributes it mainly to the demands of industry for science and technology. In fact a far more complex set of factors were at work, and industrial demands were a few among many.

The rise of "redbrick" colleges depended upon demands for their services, persons willing and able to supply them, and a suitable environment for gestation and growth. None of these could be taken for granted. After all, England had gotten along for hundreds of years with only two universities. There was no tradition of greater numbers produced by local, civic, or private action, as in America or on the Continent. Even the earlier 19th Century had found London useful but Durham unnecessary. A variety of attempts at provincial civic colleges had fallen upon even stonier ground, Owens College, Manchester, barely survived the 1850s, and only in the 70s did new colleges begin to find a readier acceptance. The conditions necessary for development appeared in the course of Victoria's reign.

The context of events in Victorian England was one of stress, change, and growth. The period only appears calm in retrospect; at least until the 80s it was a dynamic, even revolutionary era. Stresses were most noticeable, called to the attention by the protests of the poor and the unenfranchised and the sights and smells of cities. Changes in the social, political, and intellectual order might be responses to stressful problems; notable examples ranged from sanitation legislation to religious compromise. They might also arise from the sheer pressure of growth, of new and expanding factors in society, and it was growth and the changes it implied which produced increased and varied demands for higher education.

The most obvious growth was of people. England and Wales more than doubled their population between 1830 and 1890. Urban and suburban areas grew particularly fast, and by 1871 the conurbations centered on Manchester, Leeds, and Liverpool contained 1,386,000, 1,064,000, and 690,000 people respectively; a mass of potential benefactors and clients which had not existed a generation before.

The middle class grew particularly fast as the tertiary sector of the economy, and occupations requiring higher education, expanded along with

productive capacity. Urban and class expansion, and efficient transport, gave society a new scale and fluidity. Status became less ascriptive under these circumstances, and an education might be part of a successful assertion of a new or higher position within the very broad middle class.

Increasing wealth was increasingly available as the 19th Century progressed, especially in the Midlands and North. Both average income and the number of wealthy persons increased. Greater income for the middle class and the aristocracy of labor made attendance possible; wealth made benefactions more likely. The availability as well as the quantity of wealth increased. Manufacturing and especially trading fortunes were more liquid than real estate, while second or third generation wealth was less tied to business, a factor encouraged by the introduction of limited liability. Later generations could safely dispose of capital, and might be more concerned than the newly risen with the status that charity could buy.

Knowledge also expanded rapidly in the 19th Century. Traditional subjects developed new aspects, while new natural and social sciences appeared. Techniques and data in new fields enlarged the number of teachable disciplines. With little employment available in traditional institutions, teachers could be found for any subject. Significantly, the largest bodies of information and teachers were in the subjects of the traditional university curriculum, and demand for those subjects was thus most easily met, and likely to be encouraged.

To elicit widespread support among those who might reasonably contribute or attend, education must be viewed as a societal necessity. During the 18th Century higher education had seemed sufficient in variety and quantity for society's needs. Universities produced clerics, and private tuition, the Inns of Court, and the capitals of Europe trained men of affairs. The 19th Century reasserted the idea that education was a public as well as private good; it should be supported by charity and legislation as well as purchased by individuals.

Critics began to refer to the universities as public and national in the 30s[2] and this liberal interpretation soon extended to parliament, which began to reform Oxbridge in the 50s. Commentators pointed to local and national needs for an educated electorate, trained managers, technicians, and workers, and suitable education for the newly powerful middle class. The potential personal benefits of education also increased for increasing numbers of people. Charitable effort created a system of elementary education,

pupils' fees, contributions, and the reform of ancient trusts produced a secondary network, and new Oxbridge colleges, new universities, and growing numbers of libraries, museums, etc., testified to the Victorians' concern for education.

In these circumstances colleges were successfully established in Manchester, Leeds, Liverpool and other cities. The three named form a large and varied sample from which to draw tentative conclusions about the origins of civic universities.

Manchester was the first city of the area and age, in population, wealth, and influence. Predominantly a mercantile city, yet the center of a manufacturing district, it combined the dynamism of industry with the expansive and cosmopolitan attitudes of large scale trade. It was natural for the first redbrick college to appear there in 1850. John Owens left his fortune to found a non-sectarian college to teach university-type subjects to all comers (though giving first preference to local students). After tentative beginnings, while seeking and creating a clientele and reputation, the college was growing at a steady rate by the mid 60s, in conjuction with improvements in secondary education it had necessarily encouraged. Student numbers were matched by increasing funds, allowing physical expansion, the incorporation of a medical school and museums, and the development of such costly technical fields as engineering. By the mid 70s the college enrolled approximately 1,400 day, evening, and medical students, and was gaining local prestige and national and international recognition. Its inevitable attempt to become a university was countered by Liverpool and Leeds, which feared the impossibility of their schools' competing with a degree granting institution, and a compromise was effected. A federal Victoria University was chartered in 1880 with Owens as its first constituent college and provision for Leeds, Liverpool, and perhaps other institutions to join when suitably equipped.[3]

The Yorkshire College of Science at Leeds opened in 1874, but only in 1886 did it achieve the size, wealth, and curriculum necessary to enter the Victoria University. Its promoters were worried by foreign competition and concerned with technical education but the public apparently did not share their concern. Leeds was in any case smaller than Manchester, and without the latter's cosmopolitan outlook. While expansion in arts subjects was opposed, technology and science also failed to attract much support, and the college's government appeared rather arbitrary and unacademic. It achieved

admission to the Victoria University but remained its weakest constituent, and resisted the breakup of the federal arrangement in part because it feared to stand alone.

University College, Liverpool arose under more favorable auspices. Its late start in 1881 gave it models to emulate or reject, and an obvious goal of admission to the new Victoria University. The city and its elite possessed a long tradition of culture and public service, and the past glories of Liverpool's intellectual life could be recalled and perhaps revived. A well integrated social and economic aristocracy was accustomed through long experience to providing the institutions of education. The call for a college was well received and a carefully thought out scheme elaborated. A balanced curriculum, good faculty, and a clientele were quickly found, and by 1884 the college was a constituent of the Victoria University.

New institutions had necessarily to define their services and the demand for them so as to secure a clientele. Students were not only a raison d'etre but also a certification of usefulness which encouraged further support. The middle classes (including many great merchants and manufacturers) created the civic colleges largely for themselves, as benefactors, officers, and faculty often stated. The scale of fees, age of admission, and the curricula with their implications as to future employments all confirmed the concentration upon the middle class. This class basis was not only economic and social; the entire educational system confirmed and reinforced class divisions. The Taunton Commission defined secondary education as for the middle classes in 1868, and saw it divided into three parts: a first class education which was classical and continued until at least 18; a second grade which added modern subjects to classics and ended at 16; and a third grade, terminating at 14, which concentrated on basic literacy and numeracy with perhaps some scientific, commercial, or technical training. In 1895 the Bryce Commission accepted the Taunton divisions as both a sound prescription for and a reasonable description of the provision of secondary education.[4]

The second grade and the lower portion of the first provided the typical student. The great schools' late leaving age as well as social considerations might militate against admission to a civic college. The major public schools were increasingly retaining their pupils until the age of 19, and entrance to the university after that meant a greatly delayed entry into business, which was generally unacceptable to the business community.

The third category of secondary education provided part of another potential clientele. The colleges were prepared to serve a self-selected elite of determination and intellect from the working classes, the bottom of the petit bourgeoisie, and those like elementary schoolteachers precariously balanced between the two. Classes were offered suitable to the limited preparation gained through third class secondary education, the best and most advanced of elementary schools, or autodidacticism. Evening and weekend schedules met the needs of the employed. A narrow scholarship ladder existed to bridge the gaps between elementary, secondary, and higher education, and the civic colleges expanded this with scholarships to both evening and day classes, often expressly for working class students.

The colleges' provision of evening courses represented more than altruism. Such courses swelled student numbers, helped demonstrate the colleges' usefulness to the community, and attracted donors especially concerned for their "inferiors" or their workpeople. These gifts and student fees also increased the often inadequate regular salaries of the college faculty.

The requirements of all these students shaped the civic universities. Many of the demands were small or only incipient in the 19th Century, but so were the new colleges, and the two grew together in the 20th Century.

A greatly expanding demand was that for the various forms of traditional liberal education, more or less modified by the introduction of some new subjects alongside classics and mathematics. This category included almost all of the demand for classics, a great deal of that for history, substantial amounts of that for mathematics and English (especially literature), and some portion of that in a variety of other fields including modern languages and the "pure" sciences. Perhaps it should be called general education.

The most widely touted value of general education was its functions as social preparation and emollient, along with the less-expressed but often more considered concommitant of conferring social status. Status ascription by education was certainly not unique to England, but was peculiarly widely accepted there, perhaps because of the unusual opportunities to achieve such education and consequent status. Liberal education was that offered by the universities and public schools whose social status, steadily recovering during the Victorian era, was transferred to their curriculum; it was the education of the social and governmental elite; hence it was <u>the</u> mode of preserving or elevating one's status. Given the enormous 19th Century expansion of classes concerned with

this problem, and the increasing extent to which the large and impersonal scale of an urban and mobile society confirmed the proposition that a gentleman was anyone who looked, spoke, and acted like one, concern over social position represented a great potential demand for higher education. The growth of the middle class meant not just the expansion of status consciousness, but also the rise of a class peculiarly ready to admit all who subscribed to its mores and manners.

While the more grossly materialistic aspects of this demand might not be easily discussable by educators, the social value of liberal education was part of the stock in trade of speeches. At Owens the founder himself had prescribed a liberal curriculum and his trustees, in preparing to carry out his wishes, were particularly concerned that classics and mental and moral philosophy should be provided for their ability to combat the narrowing tendencies they saw inherent in Lancashire.[5] Their first Principal lost no time in publicly expressing these values: his inaugural address emphasised the great value of general culture for the receipient and the public and the intrinsic value rather than the usefulness of scholarly pursuits. The theme of cultivation, and its particular necessity in Lancashire, continued to be heard on every public occasion, and was transported to Liverpool without damage or notable alteration.

The disinterested pursuit of literary and scientific culture was not uncommon among the middle class. Faculty and benefactors spoke with genuine fervor of the intrinsic values and pleasures of education, and these were now increasingly available to a growing public. Literary and philosophical societies and all the paraphernalia of provincial culture attested to this interest.

The best certification of a liberal education, regardless of why it was desired, was a university degree, and the colleges' concern with degrees reveals their estimate of this demand's importance. They gave constant attention to London degree requirements,[6] became affiliated to London where possible, and unceasingly advertised their preparation for degree examinations and their students' successes. They also created a grade of Associate to honor graduates and also to mark the achievements of their best students who for one reason or another did not take a degree. Their eventual demand for university status was based in a large extent on their desire to award their own degrees. The utilitarian functions of degrees are discussed below, but two other aspects which enhanced their desirability deserve mention. As small

employers and selection by patronage were replaced by large firms and necessarily impersonal methods of selection, a degree began to represent what it still most frequently means to employers today: not necessarily a certification of particular or technical training, but a testimony to the diligence and general intellectual competence of the recipient. A London degree also became a route to the more rarified heights of Oxbridge study for those provincial students whose secondary education had not qualified them for immediate admission.

Further implications of the status of liberal education enhanced its attractiveness. The growing system of examinations, originally developed as a means of stimulating and testing academic achievement, were increasingly used to select candidates for employment. Examinations testing minimum capacities were perhaps most common, being the first form used in public employment and continuing to be used for many purposes, but it was the competitive exams which became most famous and influential. Those for the Indian and home Civil Service, and for admission to the various military schools, were the most important.

The requirements of these examinations represented demands upon colleges. All placed great emphasis on classics and mathematics, which constituted between 35% and over 50% of various exams. English and modern languages were next in importance, while sciences counted for well under 20% even towards entry to the Army's technical branch.

The civic colleges responded immediately and continuously to the demands made by the growth of the competitive examinations for public employment. They emphasized their suitability as preparatory establishments by publishing detailed descriptions of the exams and announcing students' successes. An interesting juxtaposition and succession of announcements in the Liverpool Calendar and records is even more revealing. The Calendar for 1885-6 published a description of the Home and Indian Civil Service exams and also an advertisement for a cramming establishment, a "Civil Service Academy". The next year's Senate minutes reveal the appointment of a professor as counsellor to students preparing for such exams. Owens College gave constant attention to exams, enlarging the curriculum to match them and treating with the Civil Service commissioners when changes appeared to jeopardize the college's suitability as a place of preparation for such employments. Candidates for exams brought to the colleges a demand for the elements of that mid-to-late Victorian compromise, a middle class, general education,

consisting of the traditional liberal elements with the addition of English literature and history, modern language, and a tincture, but little more, of science.

The growth of the traditional professions of medicine, law, and the church, and the regular addition of new professional and semi-professional occupations produced a steadily rising and diversifying demand for higher education.[7] The establishment of a profession involved developing self-esteem among members, the accumulation of a regular body of knowledge considered necessary for all practitioners, and the desire to testify to the competence of the group's members and to exclude the unfit from the profession. The public and the state were also increasingly concerned with the quality of professional services, and minimum standards of competence were increasingly defined by law. Instances of significance for colleges included various medical acts throughout the century, the Solicitors Act of 1860, and acts of the 1870s concerning mine managers.

The organizations created to espouse these principles and goals impinged upon the civic colleges at many points, both directly and via the requirements they set for membership. Least directly, the colleges might be used to prepare for the tests of general and professional knowledge which were the increasingly common mode of entry to the professions. In many cases the college's examinations were accepted in lieu of the organization's own tests. More formally, the professional association might join the colleges in designing courses and administering tests, as was the case with law. The most intimate association occured when a profession developed an entire system of education and then transferred it to or amalgamated it with the colleges, as was the case with medicine.

The new colleges quickly recognized the importance of professional demands, particularly with the precedents before them of Oxbridge's connection with the Church and London's close links with medicine and the educational needs of the growing professional classes. At Owens, the first annual report remarked the college's deficiency in lacking well-defined links to the professions, and the college authorities set out to remedy this, both by broadening the curriculum and by emphasizing the availability and value of pre-professional, general education. Within a decade calendars were describing the exams and general requirements for the home and Indian Civil Services, Woolwich, Sandhurst, direct commission in the Army, Solicitors and Attorneys, the Royal College of Surgeons, and the Society of Apothecaries, and demonstrating the college's

ability to prepare for them. By the 70s the principal could discern a major trend toward longer lasting and more thorough education, signalized by the demands of medicine and the law for evidence of both preliminary and professional training, the examinations under the Pharmacy Act, and the establishment of professorships of engineering in Edinburgh, Manchester, and elsewhere.

Leeds attended immediately to the demands created by new professions and employments: "Yorkshire College of Science is intended to supply an urgent and recognised want, viz., instruction in those sciences which are applicable to the Industrial Arts...".[8] The specificity of such departments as Textiles, Dyeing, and Coal Mining, completes this impression.

Liverpool was equally aware of professional demands and an early appeal emphasized the needs of medical students, articled solicitor's clerks, architecture and engineering pupils, and nearly 800 pupil teachers for both general and professional education. Awareness was not confined to the committee: the council of the School of Medicine offered to endow the chair of experimental physics almost before a College Council was there to accept it. A request by law students for a course of lectures was approved in June, 1881.

The professions were by no means solely concerned with specifically professional training. Their concern with general education of a liberal character formed a major addition to the demand born of non-professional, non-occupational reasons. Most obviously, a sound general education was the necessary preliminary to the understanding of a course of professional education, and lingual and mathematical skills would be regularly exercised in any employment requiring substantial education. Of perhaps more constant concern to many professional persons and organizations was the social standing which went with a liberal education. Both new and older, revitalized and expanding professions were desperately concerned with the social status of their members and of their calling itself. The general cachet of liberal education and specific attempts on the part of new professions to resemble the traditionally accepted liberal professions, with their custom of university education, were involved.

This form of professional demand was progressively institutionalized throughout the 19th Century with the result that by the 1930s Carr-Saunders could say that " . . . there are not many exceptions to the rule that two tests are imposed, the first a test of general education and the second

a test of professional competence . . . . Where there is a first test, there is always a choice, usually a wide choice, of approved examinations."[9] While any general education tests could be prepared for at the new colleges, their own exams were obviously most acceptable. Examples emphasized in the Owens calendars of the 60s included: any university exam as an exemption from the preliminary exam at Sandhurst, London Matriculation exempting the holder from one year of solicitor's articles and a bachelor's degree from two, and a degree or matriculation exempting from the preliminary exam of the College of Surgeons.

Among the traditional professions medicine altered most radically during the 19th Century, and was most closely connected with new colleges. Training had shifted from apprenticeship to proprietary schools when the growing complexity of medicine made formal instruction in anatomy and other subjects imperative. Further growth of knowledge, the need for even more formal training in chemistry, physics, and clinical subjects, and the prestige of liberal education all sent the profession to the new colleges. Doctors supported all of them, and were an initiating force at Liverpool. By the turn of the century the colleges' medical schools had absorbed or replaced proprietary medical education.

The law, and particularly its lower branch which lacked traditional educational institutions, collaborated closely with Owens and University Colleges. The traditionally low social standing of attorneys and solicitors made them conscious of the value of liberal education and professional preparation of a demonstrably high standard. Local law societies helped devise curricula, provided funds, and offered scholarships.

The established Church had little need of the colleges, but dissenting clergy had long sought convenient sources of liberal education, and arrangements with various seminaries gave the colleges, especially Owens, a valued source of serious and mature students.

Specific business studies languished, faced with the entrenched opinion that management was best learned on the job. However, the increasing complexity of business affairs, accountancy, actuarial studies, etc., began to make maths and languages useful. The lower ranks of business made greater demands, especially upon the evening classes. Clerks in England numbered about 150,000 in 1851 and over 600,000 forty years later.[10] As secondary education was limited and expensive many entered employment minimally educated and then sought to improve their basic skills. More specialized

and desirable posts, and increasing competition, added modern languages, commercial geography etc., to English and maths as desiderata. Evening class prospectuses emphasized their courses usefulness in this regard, and Leeds even offered such immediately practical subjects as shorthand.

Teaching was logically linked to the colleges. Elementary school-teachers needed only a lower secondary education but advancement within this mushrooming profession to better schools or adminstrative posts required further learning. Increased science teaching in schools also producted corresponding demands upon the colleges. Owens led the way from 1855 with courses in classics, mathematics, and natural philosophy at times and prices suited to working teachers, and other colleges followed this lead in the 70s and 80s. The enormous expansion of middle class schools provided a higher class of position for college alumni. A far smaller group of teachers deserve notice: by the 80s the colleges were employing their own and each other's best products.

The demands of industrial Britain for science and technology are given the central place in most accounts of the origins of civic universities. The demands were there and the subjects were professed, but their relative and absolute scale were by no means so great as is often presumed. Sciences were certainly popular in the civic colleges. Chemistry generally had the largest enrollment of any subject, as natural philosophy became physics it attracted more students, and there was a growing demand for various life sciences. These subjects were little taught elsewhere, and great reputations could be quickly achieved, notably that of Owens' chemistry department under Roscoe. That this teaching reflected mainly industrial demands is doubtful, however. Many sciences were still being defined, and few non-scientists were even aware of them. Physics hardly entered into industry until the development of electrical engineering at the end of the century, and the life sciences were of little concern. Even chemists found little industrial employment, as the older heavy chemical industry did little research and newer fields failed the test of international competition.

Science students found other employments. Some became teachers. A significant number were merely fulfilling the very broad requirements for a London University degree or matriculation. Of the many chemistry students the largest single group were medical students. The profession of analyst was also expanding rapidly, furthered by the demands of government regulation and public health.

Technology had a very small place in the colleges which formed the Victoria University. Up to 1890 Manchester and Liverpool offered no technical courses except engineering. Leeds offered a coal mining course (which had a small but steady clientele of potential mine managers), engineering, and its textile departments. Together these courses represented only a quarter of class enrollments at Leeds in 1890.

Engineering was the characteristic and central technology of Victorian England. The profession's success was not linked to higher education, however. Apprenticeship was customary, private study an additional support, and Smiles' Lives of the Engineers the gospel. Early engineering courses at London, Owens, and elsewhere had little practical content and failed to alter prejudices in favor of methods which had brought past and present successes. Demand for courses naturally corresponded to the small demand for and great suspicion of college trained engineers. Only in the 80s, as British empirical methods came to seem inadequate as compared with America and the Continent, did efficient courses and viable enrollments begin to appear.

Given the attitude of the leading branch of Victorian technology the more general disinterest in high level technical education is unsurprising. Informal education and training had placed Britain at the summit of world industry and trade, and only a few critics foresaw future inadequacy. Considerations of class intervened. High status education was general and liberal, and technical education was relegated to the working class. Even there, assumptions about what constituted formal education versus technical training encouraged the English definition of technical studies as confined to the scientific background of techniques which would be learned on the job.

Prof. Sanderson's study of the links between universities and British industry confirms that the greatest disjunction was industry's failure to provide a demand for graduates,[11] and there is really no contradicting evidence. Indeed, the action of industry may not even have been irrational. Habakkuk argued convincingly that the relative decline of Britain's industrial position in the world was largely a function of such factors as population, resource availability, and capital accumulation, and not the failure of scientific and technical knowledge.[12] A real need for university trained scientists and technologists may only have appeared in the 20th Century.

Some notion of the proportional importance of these varied calls upon the civic colleges can be gained through a look at class enrollments.

CLASS ENROLLMENTS

Manchester	52-3[a]	59-60	69-70	79-80	89-90[e]
Arts	61%	61	50	41	33
Math	15%	14	10	8	8
Science[b]	24%	26	33	39	47
Tech[c]	-	-	4	4	6
Other[d]	-	-	3	8	6

LEEDS		a	
	Arts	30.5%	24
	Math	6.5%	6
	Science	44.5%	42
	Tech	17 %	25
	Other	1.5%	3

LIVERPOOL		(1882-3)a	
	Arts	68%	40
	Math	16%	10
	Science	16%	37
	Tech	-	13

a. At Manchester 1852-3 was the first complete academic year. At Leeds before the 80s there was nothing like a full range of properly supported Arts courses to choose from. 1882-3 was Liverpool's first full year.

b. Chemistry was the most popular science at all three colleges.

c. Engineering was the only technical subject offered at Manchester and Liverpool. Leeds offered textile sciences and coal mining as well.

d. Jurisprudence and Law represented the bulk of Other enrollment at Manchester, equalling Engineering in 79-80 and 89-90.

e. Women's enrollments are not included in Manchester statistics for 1889-90. They were still few in total number, but 88% were in Arts. Arts also represented over 50% of Owens' evening enrollments until the late 70s, declining slowly thereafter.

Enrollment figures offer a guide to students' long term intentions as well as their immediate demands. Arts subjects may reflect interest in the civic service, the professions, or other jobs where both the subject matter and the evidence of cultivation might prove useful. Some science enrollments represent similar motives, notably among those seeking London degrees. Chemistry offered the only likely route to industry, but other fields, especially medicine, interested many students. Science teaching, the growing academic profession, and the first research posts in government and universities were attractive to some. Technical courses obviously imply technical jobs, but even here the links are by no means all with industry. Many of the best engineering positions were in government or Indian service, and in civil engineering generally.

Students from a fairly wide range of social and economic backgrounds (but mainly from the local area; even Manchester had attracted relatively few students from a distance before the 20th Century) could prepare themselves at the colleges for an equal variety of positions in an expanding society. The professional, commercial, bureaucratic, and manufacturing middle classes formed the core of the student body; they founded and funded the colleges as well.

The civic colleges were built upon charity. Fees sometimes provided a significant income but this rarely approached 50% of regular annual income, while total income was often insufficient to meet operating expenses. Physical plant, capital projects, endowments, and often subvention of annual expenditure all had to come from benefactions. The Yorkshire College summarized the position in 1876: "The contribution of some part of the general expenses [by students' fees] of higher education is as much as can be looked for, there being no instance of public education of such a character being entirely self-supporting." That the means of support beyond student fees should be private benevolence, is, in a world-wide context, almost as rare as self-support. While the amounts contributed to higher education in Victorian Britain by private benefactors are relatively small as compared to the American case, they are immense in any other comparative context. No other nations had any significant tradition of private support for universities, much less the idea that they might be <u>founded</u> through private generosity and activity.

The state was not a significant provider; exchequer support followed rather than created success at Manchester, Leeds, and Liverpool. Indeed, evidence of local support and independent success were generally prerequisites

of national subvention. Local government was of direct financial assistance only at Liverpool, though unofficially helpful everywhere.

Charity, made permanent in institutions and trusts, was the English manner of providing the higher forms of education, and much of general education as well. Oxford and Cambridge perhaps arose as corporations of masters, but they owed their physical presence, wealth, and permanence to a long succession of benefactions which created and endowed their colleges.

Tudor/Stuart London had created a nationwide system of schools in a manner which paralleled the later foundation of civic universities. London was growing rapidly, and a new class of merchants great and smaller were rising to economic importance and attempting to acquire political and social power as well. Jordan's Philanthropy in England[13] portrays these men as recognisable predecessors of 19th Century types. They were leaders who embodied their ideas in institutions; their wealth was liquid and they were accustomed to use and risk it for great projects; they were new men seeking both to enter and to reshape society. Such men were unprecedently charitable, particularly towards education. They endowed London and England generally with a system of grammar schools which provided advanced education to new classes of people. Their motives were those of the 19th Century as well, and the later manifestation created the civic universities.

Some idea of the variety and significance of 19th Century donors can be given statistically. Excluding the founder's gift of £100,000, Owens College had received about £400,000 by 1886.[14] 10% came from businesses and other organizations and 90% from individuals, many of whom gave repeatedly. Corporate and private donors of amounts under £100 produced a tiny proportion of the total. Among business contributors, those who gave £100-499 produced £11,000, while large donors gave £28,000. Of the £11,000, over half came from merchants and 25% from manufacturers, plus smaller amounts from engineering and law firms. The £28,000 represented less mercantile wealth and an almost equal proportion of manufacturing money, while over a third came from engineering.

Medium and large scale individual donors gave £29,000 and £104,500 respectively. Half of each group were merchants, 20% were manufacturers, and engineers formed the next largest group at 10%. The proportions of money and donors were roughly commensurate, though merchants were slightly less and engineers somewhat more than proportionately generous. There were also 13 great donors (in addition to the founder) who each gave over £5,000, and whose gifts totalled £221,000. They were too few in number and too varied in

their occupations to be analyzed collectively. C. F. Beyer was an engineer, but it was the success of Beyer, Peacock as manufacturers which allowed him to give the college £105,000. George Faulkner, like the founder, was a merchant who also engaged in manufacturing. Two great donors were ladies of independent means. Charles Clifton was an expatriate speculator who left the college a fortune in American stocks and shares. (Engineers were especially noticeable among Owens supporters, and the variety of their employments also entitled them to a category separate from manufacturers or professional people. They were naturally interested in their field, but made substantial contributions to the general funds as well. The two greatest contributing engineers, Whitworth and Beyer, gave enormous amounts in the 80s to an already flourishing institution, creating a distinguished department, but by no means the basis of the university.)

No particular group was wholly or even primarily responsible for supporting Owens, unless it was the middle class, broadly defined. Even there, the analysis of occupation has concealed the support of substantial numbers of peers, and of a certain number of country gentlemen of scholarly and philanthropic interests who do not appear in city directories. All sorts of citizens possessed of sufficient means contributed in proportion to their wealth and/or their interest in their reputations, children, businesses, or the repute and culture of their city.

At Liverpool and Leeds a shorter time span and less complete data prevent exact comparison with Manchester, but similarities and differences are discernible.[15] Liverpool's pattern of philanthropy was very similar to Manchester's, with perhaps an even higher proportion of mercantile wealth. Professional persons' contributions, concealed by their relatively small individual size in the Manchester statistics, are emphasised at Liverpool, where a special subscription list had been opened to demonstrate the importance which men of high intellectual attainments though relatively small fortunes attributed to the college. At Leeds the proportionately greater significance of business donations, and of small and medium rather than large donations, reflect the smaller scale of the undertaking and perhaps its utilitarian and technical bent.

These very various donors were encouraged by an equal variety of motives. The doctrine that wealth implies responsibilities had been fervently preached and widely accepted in Tudor/Stuart England, and it descended to the Victorians mixed with a more secular traditional sense of responsibility of the elite for

its inferiors. Religion and pride combined to exhort the 19th Century's potential donors: "Some recognition at least of the obligation to subscribe to charity, from whatever motives, was so widespread among the upper and upper-middle classes that philanthropy became a social imperative..."[16] Carnegie spoke for many other wealthy Victorians when he insisted that wealth should be used for the common benefit under the presumably exceptionally able direction of its possessors. Among the supporters of civic colleges the founder of Mason College was the most consistant exponent, publicly and privately, of this doctrine of stewardship. Similar feelings were obviously strong in those well-established families, like the Heywoods, Rathbones, and Marshalls who supported colleges as part of a long tradition of major charitable activities.

Supporting education meant providing opportunities, and this form of charity appealed peculiarly to the Victorians, who feared the pauperising effects of outright gifts to individuals but who could see the availability of education as a support of Smilesian self-help. Providing education might appeal particularly to those who had succeeded through grasping slender opportunities and who compassionately desired to broaden these for potential successors. This motive was very widespread on the American scene, and was equally notable in men like Mason, Beyer, and other self-made English philanthropists.

Opportunities might be provided for specific groups as well as for the general public. Notable were those who had been barred from higher education by religious discrimination. The Tests kept Dissenters from Oxbridge until the mid-50s and lingering traces of statute and prejudice remained thereafter. Religious divisions had long hindered the provision of voluntary education, and were to handicap school boards long after 1870, especially in Liverpool. In the North a new non-conformist elite, educational reformers, and even many Anglicans desired to provide non-sectarian education both on principal and as a result of experiencing the practical difficulties of sectarianism. John Owens made religious toleration and the avoidance of controversial theology a fundamental condition of his trust, Mason and Firth were firm on this question at Birmingham and Sheffield, and all other civic colleges followed suit, with Liverpool even statutorily barred from teaching theology.[17] This position appealed to supporters and the public, and was jealously guarded through newspaper commentary and other criticism of any deviation.

Opportunities for women concerned many benefactors. Manchester did little before the 80s but Leeds, aware of womens' roles in Cambridge Extension and Middle Class Exams, and the power of the Yorkshire Ladies Education Association with its distinguished leaders, always welcomed women. In 1882 "a number of Yorkshire ladies", remarking the college's accessibility for women when this was still rare, and its service as a model in that respect, presented the college with 1,000 guineas.

Children of one's own and of one's class needed opportunities. Providing these was a particularly strong motive among professional people, who actively supported colleges, especially Liverpool, where the Daily Post significantly remarked "...almost every professional man is more concerned about the effective education of his sons than about anything else in the world". The childless might also be exceptionally charitable. Lack of heirs, a sentimental interest in the young, and desire for some non-biological perpetuation of family memory were all stimuli. Childless benefactors of colleges included Mason, Owens, Whitworth, and Holloway.

Pride stimulated many donors. A large gift asserted one's wealth and standing and might perpetuate one's memory. It could also assert the position of a trade or profession, testifying to the success and public spirit of engineers, shipowners, professional men, and other groups identified in college subscription lists. Civic and regional pride could be asserted through support of a college, which was not only a useful institution but also a testimony to wealth and cultivation and a proof of each city's ability, in competition with others and in spite of the nation's historic neglect of the North, to create the institutions of civilized life.[18] Every college regularly appealed to the civic pride of local citizens, and the Yorkshire College made a specialty of appeals to the benevolence of both city and region based on a desire to outdo or at least emulate Lancashire and its metropoli.

Many gifts were intended as memorials, often in the form of endowed prizes, scholarships, or chairs. In some cases the colleges were the logical recipients in light of the memorialized person's professional or scholarly interests. The Dalton Science Scholarships and Fairbairn Engineering Prize at Owens, and the Cavendish Chair of Experimental Physics at Leeds, are good examples. More frequently the person memorialized was simply interested in the college; or the benefactor was the interested party. As the success and stability of the colleges increased, the guarantee of permanence and prominence produced steadily increasing numbers of memorials.

Some donors wished to encourage a specific field of study. Gifts included collections ranging from Oriental books to biological specimens. Endowed prizes rewarded students in every subject available, from Chemistry to Hebrew. The endowment of a chair of Political Economy at Owens was created through gifts from the Cobden Memorial Committee, the Anti Corn Law League, and the widow of a prominent local student of the subject, and combined a memorial with the feeling that political economy was a study valuable both to Manchester and the nation.

The support for technology, and some of that for science, forms a special case. An investment motive is often assumed, but the small demand for science and technology and the frequency of post mortem gifts argue against any widespread expectation of immediate or personal returns. More important was a general concern with the wealth and power of the industrial districts and England as a whole, both absolutely and relative to other countries. The Nusseys and other co-founders of the Yorkshire College were gravely concerned at the advances of French textile manufacture. Faculties and Councils compared their efforts and finances with the great universities and polytechnics of the Continent.

Emulation and habit undoubtedly produced many gifts. A grammar school in one Tudor town had frequently called forth another nearby, and Victorian donors were equally likely to copy each other. In some cases the specific conditions of notable gifts attracted attention, and produced further contributions with similar stipulations. Once a contributor again a contributor was also a common phenomenon everywhere; perhaps most obviously at Leeds, where a vast majority of the important contributors to the 1885 appeal had made substantial contributions earlier.

The colleges knew that continued contributions were vital, and made every effort to encourage them. College functions from preliminary meetings through cornerstone layings, to graduations and prizegivings were made as public as possible. Some were contrived specifically for publicity, notably the soirees begun at Owens in 1861 to assist "the creation of a more general interest in the prosperity of the college." College faculty were encouraged to engage in suitable outside activities which would promote the college; this was a major purpose of the Leeds and Liverpool colleges' early and fairly extensive programs of lectures in neighboring towns. Faculty, and especially principals, also supported the colleges and answered criticisms in the columns of the local press.

Good relations with the press were clearly important. At Leeds, where the Baines family were founding contributors to the college and the owners of the most influential newspaper, this connection was easily established. After early differences, Owens and the Manchester Guardian established an amicable relationship. Under the editorship of C. P. Scott, who came to respect the college and find friends among the faculty, the Guardian and Owens were closely linked by the 70s. In general, most newspapers were pro-college in all the provincial cities, asserting the benefits of culture, science, etc. College affairs were reported with full Victorian voluminousness.

The repute of a college, and hence its ability to attract donations, was significantly dependent on the public character of its supporters and governors. As with all Victorian charities, peers were sought and found to serve as presidents, chairmen, chancellors, etc. Great and wealthy laymen, civic officials, and MPs were further warrants of social respectability, and fiscal probity. Owens original trustees had included such public figures, and his and all other colleges followed suit in their choice of Courts and Councils. This elite group served as more than a guarantee. They were often generous contributors of money as well as time and their names. Their close awareness of the colleges' needs could make their gifts especially timely, as when they strengthened weak library collections or provided temporary buildings. Perhaps most important, they made effective solicitors of funds.

Large scale and impersonal appeals via Town Meeting, handbill, newspaper, etc. were useful, and at one time or another touched on every motive catalogued above, but by themselves were insufficient. Personal solicitation was always of major importance: Owens' first Auxiliary Fund was raised principally through private representations by two of the trustees; by 1883 the Liverpool College Council was preparing lists of those who should be personally approached by a member. Faculty also made effective appeals. At Manchester Roscoe not only raised funds for Chemistry but also found a £5,000 endowment for the English chair and recruited both the wealth and the services of Thomas Ashton to lead the great Extension Fund drive. Donors themselves revealed considerable sophistication in encouraging further contributions. Several major gifts were conditional upon the success of an appeal in reaching its goal, and these conditions were quickly made public.

Appeals were not confined to individuals. Peers and industrialists led a succession of deputations to Whitehall, but laissez faire and parsimony were only slowly overcome beginning in the late 80s. Indirectly though, the

government's attention to the reform of ancient charities proved fruitful. The Charity Commissioners were diverting the revenues of archaic trusts and enlarging the scope of other educational trusts, and the colleges successfully requested a share of this largesse. The trustees of local foundations were often supporters of the colleges, which simplified matters.

Potential benefactors were further encouraged through propinquity among solicitors, donors, and ideas about higher education, In cultural and intellectual organizations the elite of a Victorian city would inevitably consider higher education. Manchester's famous Literary and Philosophical Society had entertained various plans for colleges since 1783, and in the 1830s heard a proposal, also presented to the Statistical Society and the Athenaeum, which closely resembled Owens College as founded. At least seven members of a committee formed to implement this proposal were later to be trustees of Owens' will and college. Owens College was well linked to the elite and intellect of Manchester with trustees, officers, and faculty serving as trustees of the grammar school, members of education societies, and officers of the Lit. and Phil., the Athenaeum, the Mechanics Institute, etc.

At Leeds the links with the local Phil and Lit. were even closer. The Society supported the college's representations to the government and the public, and provided meeting space. A member could hardly avoid hearing of the college: the original faculty were active members and officers, especially valued for their professional expertise, and 45% of the college's Life Governors (by virtue of donations) were affiliated with the Society. At Liverpool intellectual societies had already created much of the city's advanced education in the form of distinguished secondary schools, and members went on from there.

Associations of Protestantism and Capitalism were important as well as those of Science and Culture. Bankers, engineers, and merchants were prominent both individually and collectively at Manchester, and Liverpool appealed successfully to groups of shipowners, Scottish merchants, corn and provision traders, and professional persons. Religious affiliations were perhaps even more important. The colleges, following London's lead, were helping to make non-sectarianism respectable, and even the Established Church had few quarrels with their policy. Bishops of Manchester and Vicars of Leeds were active supporters, and at Liverpool Canon Lightfoot's speech was perhaps the most influential of early appeals. Non-conformist congregations brought many supporters together, particularly the Independent and Unitarian chapels of

the Northern urban elites. Renshaw Street at Liverpool may stand for others including Cross Street and Grosvenor Street at Manchester. Charles Beard's great reputation as minister of Renshaw Street made his constant and active advice and support of University College tremendously important. His congregation represented much of Liverpool's economic and social elite, led by the Rathbones and Holts.

Political associations also linked supporters. Mayors and aldermen served and supported the colleges, calling public meetings, serving on committees, and contributing personally (and even corporately at Liverpool). National politics also united supporters: of Manchester's nine MPs between 1847 and 1874, seven were connected with the college and five made substantial contributions.

Family ties were important everywhere. Individual donors of £250 or more to the Yorkshire College included 6 Bainses, 5 Marshalls, and 6 each of Nusseys, Luptons and Barrans. These were the great families of the community, economically powerful and shapers of opinion. The stratum of provincial civic society concerned with cultural affairs and civic repute formed a close-knit group which mobilized to support civic colleges.

All the colleges were similarly financed, but each had its peculiarities. Owens was able to trade upon its early success. From the mid 60s on overcrowding testified to useful service and attracted funds for expansion. The great Extension Fund drive began in 1867, and the appeals confidently and successfully asserted that the college had proved its ability to become a center of liberal education and a science school equivalent to those in other countries, while also providing widespread opportunities via evening classes, scholarships, etc. The press was enthusiastic, and began to envision a university for Manchester. Published reports kept the public posted on the progress of the fund and of the resulting physical plant, and this was itself an encouragement to further efforts. A total of over £211,000 was raised to erect buildings, endow chairs and scholarships and absorb museums and a medical school.

The Yorkshire College, with its technical bias, lacked the breadth of appeal which produced such a variety and number of contributors elsewhere. Leeds was smaller than Manchester and lacked Liverpool's cultural traditions. In these circumstances its survival and success were heavily dependent on an outside source. The ancient Livery Companies of London possessed large endowments for charitable purposes, and in the later 19th Century their growing income was matched by public suspicion of the amount and efficiency of their charity.[19]

The Clothworkers Company, no doubt stimulated by certain members in the Yorkshire textile trade, found a suitable outlet in the support of technical education in Leeds. They created and generously funded the Yorkshire College's textile departments, providing a million pounds over the course of a century.

Liverpool's most noticeable feature was the speed with which it established itself. This was largely a result of excellent preliminary planning. Those who requisitioned the first public meeting were themselves generous and wealthy, and the meeting was attended by a rich and representative audience. The broad yet specific and clear statement of intention, and the careful emphasis on future planning were undoubtedly impressive, as was the decision to appoint an influential and effective planning committee. An early pamphlet, distributed in 1879, brilliantly summarized the appeal of a civic college for donors:

> "The raising of the whole standard of literary and scientific training among the vast population, of which Liverpool is the centre: the filling up of an acknowledged gap in our educational arrangements: the offer of opportunities of culture to the thousands of young men, who are sent here to begin a commercial career: the bringing of the best instruction to the home of the poor student: the improvement and extension of the education of women: the more complete and thorough training of the teachers of our primary schools, - these - together with the general elevation and refinement of the common life which must inevitably result - are objects which cannot be presented in vain to a liberality, which often tested, has never yet been found wanting".

The civic universities were an institutional embodiment of a well developed provincial culture created largely by a newly risen middle class.[20] Mercantile and commercial wealth combined with social, cultural, and economic interests to create a way of life and thought distinctly different from that of an older elite tied to the land, the past, and London. Being English, this new culture was not a revolutionary antithesis of the old. Its intellectual and educational aspects incorporated both the persons and the studies of the ancient universities and the traditional classical-liberal culture.

It is often argued that in the 20th Century the provincial culture succumbed to a homogenization in which the older mode predominates. And yet it left its mark, perhaps nowhere more than in higher education. The new curricula of the civic colleges, and much of their attitudes toward research, scholarship, clientele, and purpose were accepted by all 20th Century universities. Even their organizational arrangements were influential everywhere except Oxbridge, affecting newer English universities and others throughout the Empire and Commonwealth. In themselves they remain one of the great monuments to the creative capacity of Victorian society.

FOOTNOTES

1. In addition to the three surveyed here, colleges appeared in Birmingham, Bristol, Newcastle, Nottingham, and Sheffield.

2. Notably Hamilton in the Edinburgh Review and later various critics in the Westminster.

3. W. H. G. Armytage surveys the pre-history and development of the colleges, in Civic Universities: Aspects of a British Tradition. London: Benn, 1955. The best individual histories are Joseph Thompson's The Owens College: Its Foundation and Growth. Manchester: J. E. Cornish, 1886. P. H. J. H. Gosden and A. J. Taylor (eds.) Studies in the History of A University. Leeds: E. J. Arnold and Sons, 1975, and Thomas Kelly's forthcoming history of the University of Liverpool. An excellent source of further detailed information is the college calendars, which generally include annual reports on the whole college and specific departments. Unattributed data and quotations are all derived from calendars or from the colleges' archives, whose guardians have been uniformly most helpful.

4. Commission reports represent both expert opinion and a likely source of future public and government attitudes. The class divisions of English education are also brilliantly described in the educational studies of Mathew Arnold.

5. The trustees had studied and sought the advice of a wide variety of institutions throughout the British Isles, and they reported their observations and recommendations in 1850.

6. The University of London was essentially an examining body which examined and awarded degrees, at first to those who had studied in affiliated institutions, and by the 1860s to all comers. Colleges were thus able to offer students the possibility of a degree, and to estimate and demonstrate their quality as teaching institutions.

7. The standard work on the development of professions in England is A. M. Carr-Saunders and P. A. Wilson's The Professions. Oxford U.P., 1933. A most readable modern study is W. J. Reader, Professional Men. New York: Basic Books, 1966.

8. The college, appealing in this way, defined itself very narrowly, and upon discovering the want to be neither urgent nor widely recognized found itself in straitened circumstances.

9. Carr-Saunders and Wilson, The Professions.

10. Gregory Anderson has made an illuminating study of Victorian Clerks. Manchester U.P., 1976.

11. Michael Sanderson, The Universities and British Industry. London: Routledge and Kegan Paul, 1972.

12. H. J. Habakkuk, American and British Technology in the 19th Century. Cambridge U.P., 1962.

13. W. K. Jordon, Philanthropy in England 1480-1660. London: George Allen and Unwin, 1959.

FOOTNOTES (Cont.)

14. Thompson's, The Owens College provides detailed lists of donors. Searches of city directories, local biographies, the DNB, etc., revealed the occupations of about 50% of medium and larger donors. As there is no reason to think that one occupation is more likely to be revealed than another, I have extrapolated from this data.

15. At Liverpool and Leeds the names provided by published subscription lists were investigated as at Manchester, with similar results.

16. David Owen, English Philanthropy 1660-1960. Cambridge: Harvard U.P., 1964.

17. All supporters were careful to emphasise that non-sectarianism represented great respect for, rather than disinterest in, religion.

18. This neglect included a shortage of episcopal sees, civic charters, parliamentary seats, etc.

19. On the Clothworkers Company see Thomas H. Girtin, The Golden Ram. London: The Worshipful Company of Clothworkers, 1958.

20. On the idea of a provincial culture see Edward Shils, "The Intellectuals" in Encounter, April, 1955.